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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,794	12/28/2001	Keiichi Teramoto	217811US2RD	3076

22850 7590 01/12/2006

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EXAMINER

SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,794

Applicant(s)

TERAMOTO ET AL.

Examiner

Kevin Schubert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/28/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date (<u>see attached</u>). | 6) <input type="checkbox"/> Other: _____ |

The following Information Disclosure Statements (IDS) have been placed in the file:

12282001
01302002
11052002
06202003
08062003
09302003
04052004
05032004
11052004
12232004
05092005

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DETAILED ACTION

Claims 1-2 and 10-11 have been considered.

Election/Restrictions

5 Claims 3-9 and 12-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/28/05.

Information Disclosure Statement

10 The information disclosure statements filed 1/30/02, 11/5/02, 6/20/03, 8/6/03, 9/30/03, 4/5/04, 11/5/04, 12/23/04, and 5/9/05 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because they have not been properly filed. Proper filing of an IDS may include listing references on a 1449 form or listing copending applications in a separate paragraph in the Specification.

 They have been placed in the application file, but the information referred to therein has not been
15 considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

25 Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

 Claims 1-2 are rejected as being directed to non-statutory subject matter. It appears that the method of claims 1-2 is not tangibly embodied. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

5 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims, in part a, "giving a common key to each one of the two or more processes in
10 **advance**". Applicant has not specified what the giving of the common key *is in advance of*. Examiner assumes, for examination purposes, that the giving of a common key to each one of the two or more processes is in advance of shifting an execution mode of the tamper resistant processor to an encrypted instruction execution mode. Appropriate correction is required.

15 Claims 1 and 10 recite the limitation "operating each client process" in part d. There is insufficient antecedent basis for this limitation in the claim. It appears that applicant has not properly introduced any client process (or client processes) in the claims. As such, a claim of "operating each client process" presents an issue of insufficient antecedent basis.

20 Claims 1-2 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims, for example, a "data encryption/decryption function" in the preamble of claim 1. It is unclear whether applicant intends the function to be a "data encryption **or** decryption function" or a
25 "data encryption **and** decryption function". Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, U.S. Patent No. 5,937,063, in view of Nagai, U.S. Patent No. 6,938,162.

As per claims 1 and 10, the applicant describes a method for sharing encrypted data region comprising the following limitations which are met by Davis and Nagai:

a) giving a common key to each one of the two or more processes in advance (Davis: Col 3, lines 11-61);

b) shifting an execution mode of the tamper resistant processor to an encrypted instruction execution mode (Davis: Col 3, lines 11-61);

c) operating an owner process among the two or more processes to generate a shared encrypted data region valid only with respect to the common key in a process space of the owner process (Davis: Col 3, lines 11-61);

d) operating each client process other than the owner process among the two or more processes to map the shared encrypted data region generated by the owner process to a process space of the each client process (Davis: Col 3, lines 11-61);

e) setting address information of the shared encrypted data region for each process among the two or more processes in relation to the common key in an encrypted attribute register inside the tamper resistant processor (Nagai: Col 15, lines 40-56).

Davis is silent as to setting address information in a register, as pertaining to part e of the claimed invention. Nagai discloses this limitation in a system which maintains an encrypted area management register in order to facilitate data management of an encrypted data region. Combining the ideas of

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Nagai with those of Davis allows for setting address information of the shared encrypted data region in an encrypted attribute register inside the tamper resistant processor. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Nagai with those of Davis because doing so makes the system more robust by facilitating data management of the encrypted data region.

As per claims 2 and 11, the applicant describes the method of claims 1 and 10, which are met by Davis in view of Nagai, with the following limitation which is also met by Davis in view of Nagai:

Encrypting/decrypting data to be sent/received to/from an external memory at the tamper resistant processor by referring to information set in the encrypted attribute register inside the tamper resistant processor when the each process carries out a write/read operation with respect to the shared encrypted data region (Davis: Col 3, lines 11-61; Nagai: Col 15, lines 40-56).

Conclusion

This action is made non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER